

- (c) substantially separating the support and bound probe-target complex from the sample medium;
- (d) contacting the support and bound probe-target complex with a second medium;
- (e) releasing the probe-target complex into the second medium;
- (f) substantially separating the support from the second medium; and
- (g) amplifying the target polynucleotide.

<sup>28</sup> 54. (Amended) A method for detecting a target polynucleotide contained in a sample medium comprising the steps of:

- (a) contacting the sample medium with reagent comprising a first nucleic acid probe which binds to the target to form a probe-target complex;
- (b) contacting the sample medium with a support which binds to the first nucleic acid probe of the probe-target complex;
- (c) substantially separating the support and bound probe-target complex from the sample medium;
- (d) contacting the support and bound probe-target complex with a second medium;
- (e) releasing the probe-target complex into the second medium;
- (f) substantially separating the support from the second medium;
- (g) amplifying the target polynucleotide; and
- (h) detecting the presence of the target polynucleotide.

Please add new claims 55-66 as follows:

<sup>29</sup> 55. The method for detecting a target polynucleotide of claim <sup>28</sup> 54 wherein the target polynucleotide is amplified with a polymerase.

<sup>30</sup> 56. The method for detecting a target polynucleotide of claim <sup>29</sup> 55 wherein the polymerase is a DNA polymerase, an RNA polymerase, a transcriptase, or Q $\beta$  replicase.

<sup>30</sup> 57. The method for detecting a target polynucleotide of claim <sup>30</sup> 56 wherein the polymerase is a DNA polymerase.

32 ~~58~~. The method for amplifying a target polynucleotide of claim ~~53~~<sup>27</sup> wherein the target polynucleotide is amplified with a polymerase.

33 ~~59~~. The method for amplifying a target polynucleotide of claim ~~58~~<sup>32</sup> wherein the polymerase is a DNA polymerase.

34 ~~60~~. A method for amplifying a target polynucleotide contained in a sample medium comprising the steps of :

- (a) contacting the sample medium with a support and a probe which binds to the target polynucleotide and the support;
- (b) substantially separating the support and bound probe and target polynucleotide from the sample medium;
- (c) contacting the support and bound probe and target polynucleotide with a second medium;
- (d) releasing the target polynucleotide into the second medium;
- (e) substantially separating the support and bound probe from the second medium; and
- (f) amplifying the target polynucleotide.

35 ~~61~~. The method for amplifying a target polynucleotide of claim ~~60~~<sup>34</sup> wherein the target polynucleotide is amplified with a polymerase.

36 ~~62~~. The method for amplifying a target polynucleotide of claim ~~61~~<sup>35</sup> wherein the polymerase is a DNA polymerase, an RNA polymerase, a transcriptase or Q $\beta$  replicase.

37 ~~63~~. The method for amplifying a target polynucleotide of claim ~~62~~<sup>36</sup> wherein the polymerase is a DNA polymerase.

38 ~~64~~. A method for detecting a target polynucleotide contained in a sample medium comprising the steps of:

- (a) contacting the sample medium with a support and probe which binds to the target polynucleotide and the support;

- (b) substantially separating the support and bound probe and target polynucleotide from the sample medium;
- (c) contacting the support and bound probe and target polynucleotide with a second medium;
- (d) releasing the target polynucleotide into the second medium;
- (e) substantially separating the support and bound probe from the second medium;
- (f) amplifying the target polynucleotide; and
- (g) detecting the presence of the amplified target polynucleotide.

38  
39/ 65. The method for detecting a target polynucleotide of claim ~~64~~ wherein the target polynucleotide is amplified with a polymerase.

39  
40/ 66. The method for detecting a target polynucleotide of claim ~~65~~ wherein the polymerase is a DNA polymerase.

#### REMARKS

Applicants wish to express their appreciation for the courtesy extended by the Examiner to Applicants' representative in telephonic interviews March 26 and April 7, the Examiner's consideration of the Draft Amendment After Final Rejection submitted April 16, the Examiner's consideration of the art references submitted April 17 (and resubmitted April 25), and the Examiner's brief discussion of the Draft Amendment and art references with Applicant's representative on April 30. (The interviews are summarized in the Interview Summaries dispatched by the Examiner on April 8.) Applicants submit these communications have proven useful: Although agreement has not been reached with respect to all claims, the Examiner has indicated that claims 53 and 54 as amended herein and new claims 55-66 are patentable.

Claims 25-54 are pending in the application. All pending claims stand rejected in an Office Action mailed January 17, 1997 and the rejection has been made final. Claims 51-54 are rejected under 35 USC §112, second paragraph as indefinite. Claim 51 is rejected for its